ABSTRACT

The present invention provides an opto-electronic device with an integrated light deflector comprises: a passive optical waveguide having a lower cladding layer, a core, and an upper cladding layer to guide and transmit optical signals; and a light deflector formed by patterning the upper cladding layer in a predetermined shape at an upper portion of the passive optical waveguide, wherein a refractive index of the core under the predetermined shape is modified to deflect a light beam by applying a current or an electrical field to the light deflector.

According to the present invention, it is possible to provide an optoelectronic device with an integrated light deflector capable of deflecting the light propagation direction without necessity of a complicated external driving circuitry.